

Title: COMPOSITIONS AND METHODS FOR THERAPY AND DIAGNOSIS ROSTATE CANCE Express Mail No. EV170134038US

Inventor: Jiangchun Xu et al. Serial No. 09/593,793

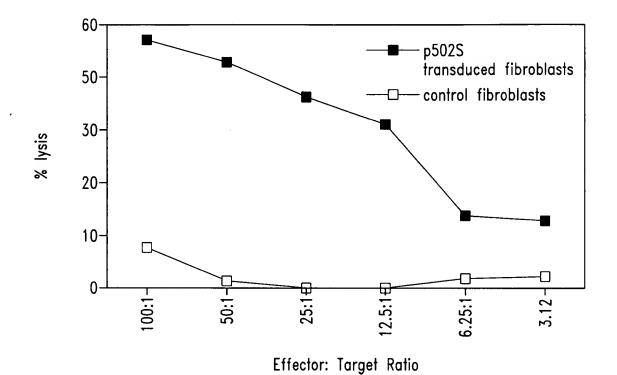


Fig. 1



Title: COMPOSITIONS AND METHODS FOR THERAPY AND DIAGNOSIS PROSTATE CANCER Express Mail No. EV170134038US

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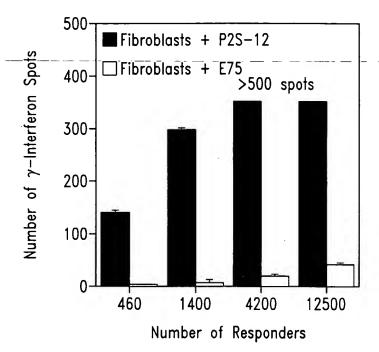


Fig. 2A

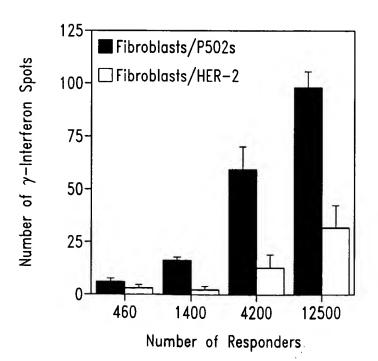
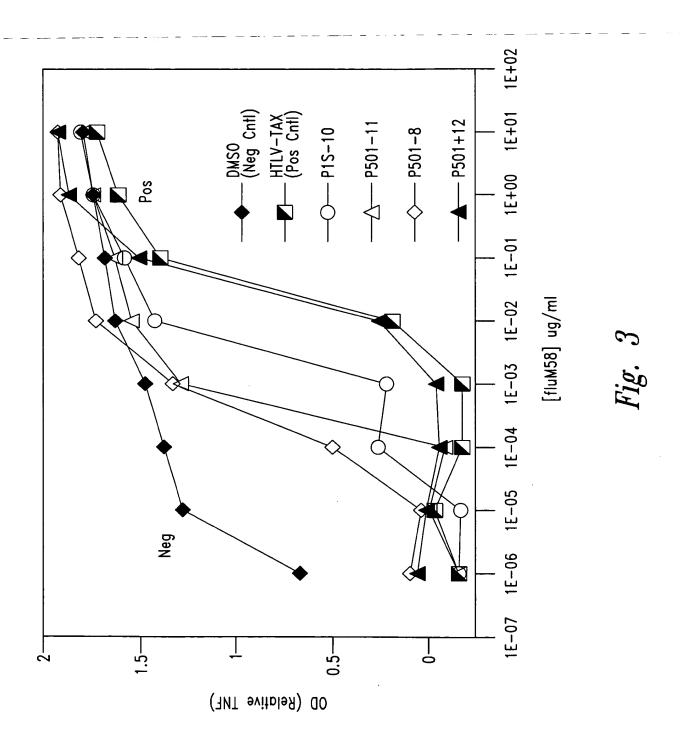


Fig. 2B

Serial No. 09/593,793 Docket No. 210121.427C15 Inventor: Jiangchun Xu et al.





Title: COMPOSITIONS AND METHODS FOR THERAPY AND DIAGNOSIS EXPROSTATE CANCER Express Mail No. EV170134038US

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70 60-Unpulsed Jurkat A2Kb 50-->-- EGFP transduced Jurkat A2Kb 40-% lysis 30-20-10-0-20 40 60 80 100 120 0 Effector: Target Ratio

Fig. 4

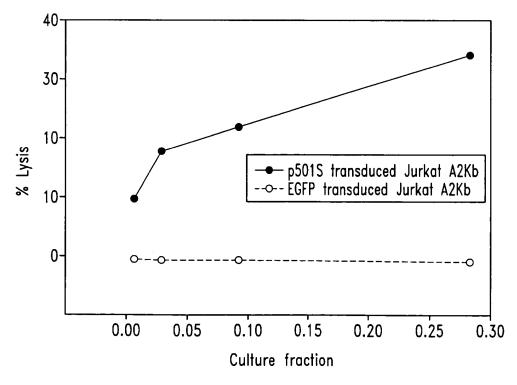


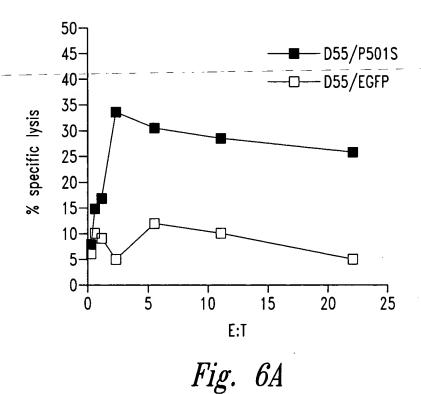
Fig. 5

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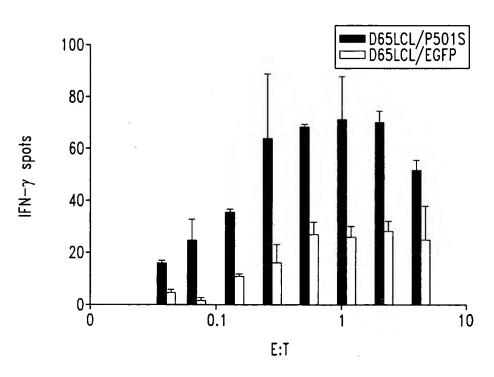


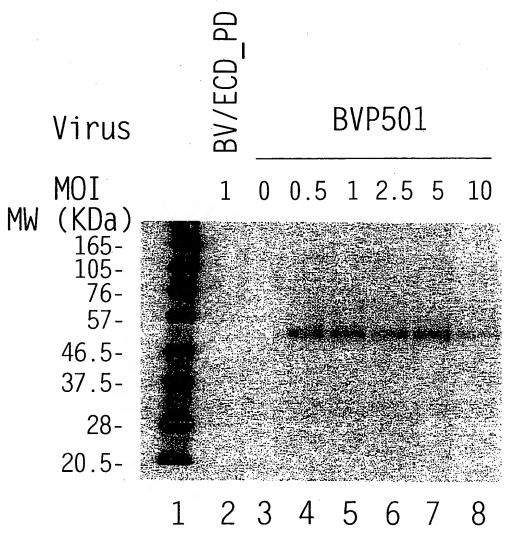
Fig. 6B



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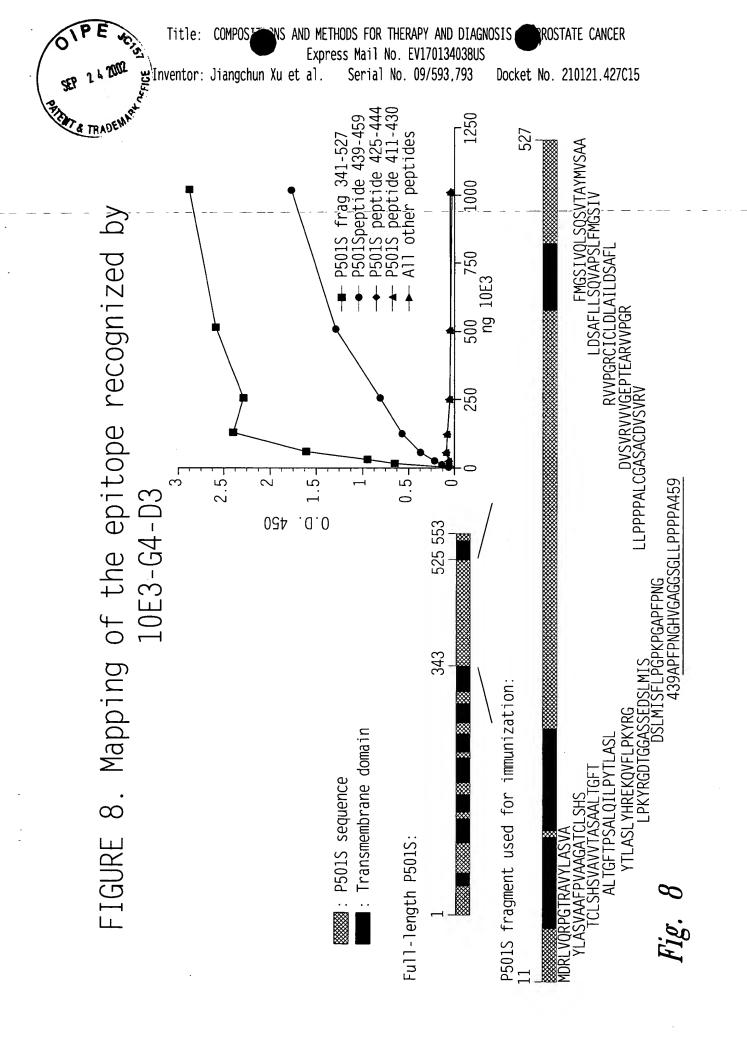
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Expression of P501S by the Baculovirus Expression System



C 6 million high 5 cells in 6-well plate were infected with an unrelated control virus BV/ECD_PD (lane2), without virus (lane3), or with recombinant baculovirus for P501 at different MOIs (lane 4-8). Cell lysates were run on SDS-PAGE under the reducing conditions and analyzed by Western blot with a monoclonal antibody against P501S (P501S-10E3-G4D3). Lane 1 is the biotinylated protein molecular weight marker (BioLabs).

Fig. 7



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Schematic of P501S with predicted transmembrane, cytoplasmic, and extracellular regions

MVQRLWVSRLLRHRK AQLLLVNLLTFGLEVCLAAGIT YVPPLLLEVGVEEKFM TMVLGIGPVLGLVCYPLLGSAS

DHWRGRYGRRP FIWALSLGILLSLFLIPRAGWL AGLLCPDPRPLE LALLILGVGLLDFCGQVCFTPL

EALLSDLFRDPDHCRQ AYSVYAFMISLGGCLGYLLPAI DWDTSALAPYLGTQEE

CLFGLLTLIFLTCVAATLLV AEEAALGPTEPAEGLSAPSLSPHCCPCRARLAFRNLGALLPRL

HQLCCRMPRTLRR LFVAELCSWMALMTFTLFYTDF VGEGLYQGVPRAEPGTEARRHYDEGVR

MGSLGLFLQCAISLVFSLVM DRLVQRFGTRAVYLAS VAAFPVAAGATCLSHSVAVVTA SAA

LTGFTFSALQILPYTLASLY HREKQVFLPKYRGDTGGASSEDSLMTSFLPGPKPGAPFPNGHVGAGGSGL

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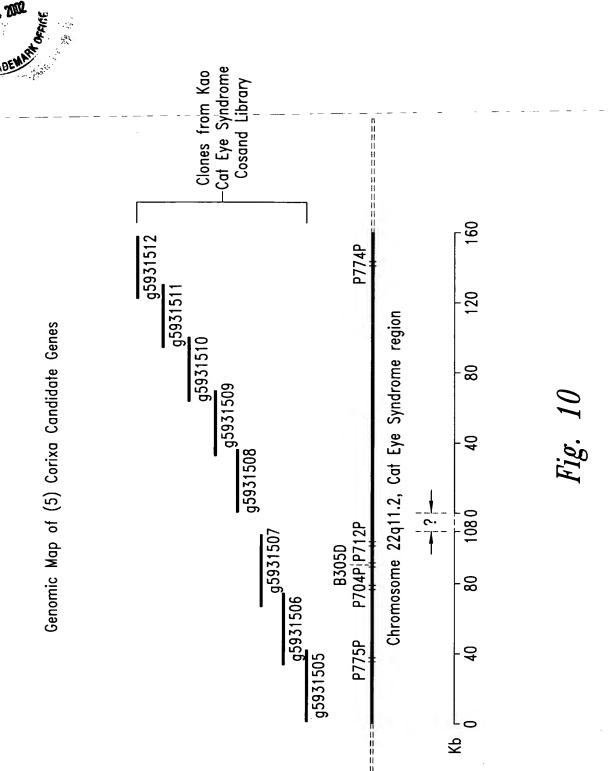
VTAYMVSAAGLGLVAIYFAT QVVFDKSDLAKYSA

<u>Underlined sequence</u>: Predicted transmembrane domain; **Bold sequence**: Predicted extracellular domain; *Italic sequence*: Predicted intracellular domain. Sequence in bold/underlined: used generate polyclonal rabbit serum

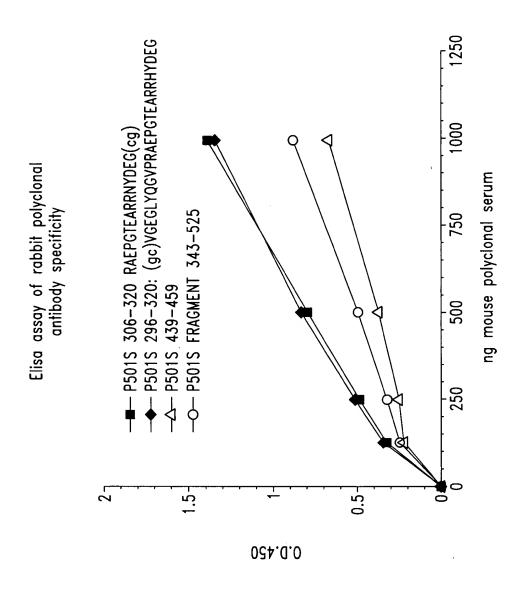
Localization of domains predicted using HMMTOP (G.E. Tusnady an I. Simon (1998) Principles Governing Amino Acid Composition of Integral Membrane Proteins: Applications to topology Prediction. J. Mol Biol. 283, 489-506.

Fig. 9

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GTCACTTAGG AAAAGGTGTC CTTTCGGGCA GCCGGGCTCA GCATGAGGAA CAGAAGGAAT 60 GACACTCTGG ACAGCACCCG GACCCTGTAC TCCAGCGCGT CTCGGAGCAC AGACTTGTCT 120 TACAGTGAAA GCGACTTGGT GAATTTTATT CAAGCAAATT TTAAGAAACG AGAATGTGTC 180 TTCTTTACCA AAGATTCCAA GGCCACGGAG AATGTGTGCA AGTGTGGCTA TGCCCAGAGC 240 CAGCACATGG AAGGCACCCA GATCAACCAA AGTGAGAAAT GGAACTACAA GAAACACACC 300 AAGGAATTTC CTACCGACGC CTTTGGGGAT ATTCAGTTTG AGACACTGGG GAAGAAAGGG 360 AAGTATATAC GTCTGTCCTG CGACACGGAC GCGGAAATCC TTTACGAGCT GCTGACCCAG 420 CACTGGCACC TGAAAACACC CAACCTGGTC ATTTCTGTGA CCGGGGGCGC CAAGAACTTC 480 GCCCTGAAGC CGCGCATGCG CAAGATCTTC AGCCGGCTCA TCTACATCGC GCAGTCCAAA 540 GGTGCTTGGA TTCTCACGGG AGGCACCCAT TATGGCCTGA CGAAGTACAT CGGGGAGGTG 600 GTGAGAGATA ACACCATCAG CAGGAGTTCA GAGGAGAATA TTGTGGCCAT TGGCATAGCA 660 GCTTGGGGCA TGGTCTCCAA CCGGGACACC CTCATCAGGA ATTGCGATGC TGAGGGCTAT 720 TTTTTAGCCC AGTACCTTAT GGATGACTTC ACAAGGGATC CACTGTATAT CCTGGACAAC 780 AACCACACA ATTTGCTGCT CGTGGACAAT GGCTGTCATG GACATCCCAC TGTCGAAGCA 840 AAGCTCCGGA ATCAGCTAGA GAAGCATATC TCTGAGCGCA CTATTCAAGA TTCCAACTAT 900 GGTGGCAAGA TCCCCATTGT GTGTTTTGCC CAAGGAGGTG GAAAAGAGAC TTTGAAAGCC 960 ATCAATACCT CCATCAAAAA TAAAATTCCT TGTGTGGTGG TGGAAGGCTC GGGCCGGATC 1020 GCTGATGTGA TCGCTAGCCT GGTGGAGGTG GAGGATGCCC CGACATCTTC TGCCGTCAAG 1080 GAGAAGCTGG TGCGCTTTTT ACCCCGCACG GTGTCCCGGC TGTCTGAGGA GGAGACTGAG 1140 AGTTGGATCA AATGGCTCAA AGAAATTCTC GAATGTTCTC ACCTATTAAC AGTTATTAAA 1200 ATGGAAGAAG CTGGGGATGA AATTGTGAGC AATGCCATCT CCTACGCTCT ATACAAAGCC 1260 TTCAGCACCA GTGAGCAAGA CAAGGATAAC TGGAATGGGC AGCTGAAGCT TCTGCTGGAG 1320 TGGAACCAGC TGGACTTAGC CAATGATGAG ATTTTCACCA ATGACCGCCG ATGGGAGTCT 1380 GCTGACCTTC AAGAAGTCAT GTTTACGGCT CTCATAAAGG ACAGACCCAA GTTTGTCCGC 1440 CTCTTTCTGG AGAATGGCTT GAACCTACGG AAGTTTCTCA CCCATGATGT CCTCACTGAA 1500 CTCTTCTCCA ACCACTTCAG CACGCTTGTG TACCGGAATC TGCAGATCGC CAAGAATTCC 1560 TATAATGATG CCCTCCTCAC GTTTGTCTGG AAACTGGTTG CGAACTTCCG AAGAGGCTTC 1620 CGGAAGGAAG ACAGAAATGG CCGGGACGAG ATGGACATAG AACTCCACGA CGTGTCTCCT 1680 ATTACTCGGC ACCCCTGCA AGCTCTCTTC ATCTGGGCCA TTCTTCAGAA TAAGAAGGAA 1740 CTCTCCAAAG TCATTTGGGA GCAGACCAGG GGCTGCACTC TGGCAGCCCT GGGAGCCAGC 1800 AAGCTTCTGA AGACTCTGGC CAAAGTGAAG AACGACATCA ATGCTGCTGG GGAGTCCGAG 1860 GAGCTGGCTA ATGAGTACGA GACCCGGGCT GTTGAGCTGT TCACTGAGTG TTACAGCAGC 1920 GATGAAGACT TGGCAGAACA GCTGCTGGTC TATTCCTGTG AAGCTTGGGG TGGAAGCAAC 1980 TGTCTGGAGC TGGCGGTGGA GGCCACAGAC CAGCATTTCA CCGCCCAGCC TGGGGTCCAG 2040 AATTTTCTTT CTAAGCAATG GTATGGAGAG ATTTCCCGAG ACACCAAGAA CTGGAAGATT 2100 Title: COMPOSITIONS AND METHODS FOR THERAPY AND DIAGNOSIS ROSTATE CANCER Express Mail No. EV170134038US

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TRADESIA ACCAGAGAA COTCOTTIGG TACTATGTGG CGTTCTTCAC CTCCCCCTTC 2220 GTGGTCTTCT CCTGGAATGT GGTCTTCTAC ATCGCCTTCC TCCTGCTGTT TGCCTACGTG 2280 CTGCTCATGG ATTTCCATTC GGTGCCACAC CCCCCGAGC TGGTCCTGTA CTCGCTGGTC 2340 TTTGTCCTCT TCTGTGATGA AGTGAGACAG TGGTACGTAA ATGGGGTGAA TTATTTTACT 2400 GACCTGTGGA ATGTGATGGA CACGCTGGGG CTTTTTTACT TCATAGCAGG AATTGTATTT 2460 CGGCTCCACT CTTCTAATAA AAGCTCTTTG TATTCTGGAC GAGTCATTTT CTGTCTGGAC 2520 TACATTATTT TCACTCTAAG ATTGATCCAC ATTTTTACTG TAAGCAGAAA CTTAGGACCC 2580 AAGATTATAA TGCTGCAGAG GATGCTGATC GATGTGTTCT TCTTCCTGTT CCTCTTTGCG 2640 GTGTGGATGG TGGCCTTTGG CGTGGCCAGG CAAGGGATCC TTAGGCAGAA TGAGCAGCGC 2700 TGGAGGTGGA TATTCCGTTC GGTCATCTAC GAGCCCTACC TGGCCATGTT CGGCCAGGTG 2760 CCCAGTGACG TGGATGGTAC CACGTATGAC TTTGCCCACT GCACCTTCAC TGGGAATGAG 2820 TCCAAGCCAC TGTGTGTGGA GCTGGATGAG CACAACCTGC CCCGGTTCCC CGAGTGGATC 2880 ACCATCCCC TGGTGTGCAT CTACATGTTA TCCACCAACA TCCTGCTGGT CAACCTGCTG 2940 GTCGCCATGT TTGGCTACAC GGTGGGCACC GTCCAGGAGA ACAATGACCA GGTCTGGAAG 3000 TTCCAGAGGT ACTTCCTGGT GCAGGAGTAC TGCAGCCGCC TCAATATCCC CTTCCCCTTC 3060 ATCGTCTTCG CTTACTTCTA CATGGTGGTG AAGAAGTGCT TCAAGTGTTG CTGCAAGGAG 3120 AAAAACATGG AGTCTTCTGT CTGCTGTTTC AAAAATGAAG ACAATGAGAC TCTGGCATGG 3180 GAGGGTGTCA TGAAGGAAAA CTACCTTGTC AAGATCAACA CAAAAGCCAA CGACACCTCA 3240 GAGGAAATGA GGCATCGATT TAGACAACTG GATACAAAGC TTAATGATCT CAAGGGTCTT 3300 CTGAAAGAGA TTGCTAATAA AATCAAATAA AACTGTATGA AACTCTAATG GAGAAAAATC 3360 TAATTATAGC AAGATCATAT TAAGGAATGC TGATGAACAA TTTTGCTATC GACTACTAAA 3420 TGAGAGATTT TCAGACCCCT GGGTACATGG TGGATGATTT TAAATCACCC TAGTGTGCTG 3480 AGACCTTGAG AATAAAGTGT GTGATTGGTT TCATACTTGA AGACGGATAT AAAGGAAGAA 3540 TATTTCCTTT ATGTGTTTCT CCAGAATGGT GCCTGTTTCT CTCTGTGTCT CAATGCCTGG 3600 GACTGGAGGT TGATAGTTTA AGTGTGTTCT TACCGCCTCC TTTTTCCTTT AATCTTATTT 3660 TTGATGAACA CATATATAGG AGAACATCTA TCCTATGAAT AAGAACCTGG TCATGCTTTA 3720 CTCCTGTATT GTTATTTTGT TCATTTCCAA TTGATTCTCT ACTTTTCCCT TTTTTGTATT 3780 ATGTGACTAA TTAGTTGGCA TATTGTTAAA AGTCTCTCAA ATTAGGCCAG ATTCTAAAAC 3840 ATGCTGCAGC AAGAGGACCC CGCTCTCTC AGGAAAAGTG TTTTCATTTC TCAGGATGCT 3900 TCTTACCTGT CAGAGGAGGT GACAAGGCAG TCTCTTGCTC TCTTGGACTC ACCAGGCTCC 3960 TATTGAAGGA ACCACCCCA TTCCTAAATA TGTGAAAAGT CGCCCAAAAT GCAACCTTGA 4020 AAGGCACTAC TGACTTTGTT CTTATTGGAT ACTCCTCTTA TTTATTATTT TTCCATTAAA 4080 AATAATAGCT GGCTATTATA GAAAATTTAG ACCATACAGA GATGTAGAAA GAACATAAAT 4140 TGTCCCCATT ACCTTAAGGT AATCACTGCT AACAATTTCT GGATGGTTTT TCAAGTCTAT 4200 TTTTTTCTA TGTATGTCTC AATTCTCTTT CAAAATTTTA CAGAATGTTA TCATACTACA 4260 TATATACTTT TTATGTAAGC TTTTTCACTT AGTATTTTAT CAAATATGTT TTTATTATAT 4320 TCATAGCCTT CTTAAACATT ATATCAATAA TTGCATAATA GGCAACCTCT AGCGATTACC 4380 ATAATTTTGC TCATTGAAGG CTATCTCCAG TTGATCATTG GGATGAGCAT CTTTGTGCAT 4440 GAATCCTATT GCTGTATTTG GGAAAATTTT CCAAGGTTAG ATTCCAATAA ATATCTATTT 4500 ATTATTAAAT ATTAAAATAT CGATTTATTA TTAAAACCAT TTATAAGGCT

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TTTTCATAAA 4560 IGTATAGCAA ATAGGAATTA TTAACTTGAG CATAAGATAT GAGATACATG AACCTGAACT 4620 ATTAAAATAA AATATTATAT TTAACCCTAG TTTAAGAAGA AGTCAATATG CTTATTTAAA 4680 TATTATGGAT GGTGGGCAGA TCACTTGAGG TCAGGAGTTC GAGACCAGCC TGGCCAACAT 4740 GGCAAAACCA CATCTCTACT AAAAATAAAA AAATTAGCTG GGTGTGGTGG TGCACTCCTG 4800 TAATCCCAGC TACTCAGAAG GCTGAGGTAC AAGAATTGCT GGAACCTGGG AGGCGGAGGT 4860 TGCAGTGAAC CAAGATTGCA CCACTGCACT CCAGCCGGGG TGACAGAGTG AGACTCCGAC 4920 GAATGGTATA GAATTGGAGA GATTATCTTA CTGAACACCT GTAGTCCCAG CTTTCTCTGG 5040 AAGTGGTGGT ATTTGAGCAG GATGTGCACA AGGCAATTGA AATGCCCATA ATTAGTTTCT 5100 CAGCTTTGAA TACACTATAA ACTCAGTGGC TGAAGGAGGA AATTTTAGAA GGAAGCTACT 5160 AAAAGATCTA ATTTGAAAAA CTACAAAAGC ATTAACTAAA AAAGTTTATT TTCCTTTTGT 5220 CTGGGCAGTA GTGAAAATAA CTACTCACAA CATTCACTAT GTTTGCAAGG AATTAACACA 5280 AATAAAAGAT GCCTTTTTAC TTAAACGCCA AGACAGAAAA CTTGCCCAAT ACTGAGAAGC 5340 AACTTGCATT AGAGAGGGAA CTGTTAAATG TTTTCAACCC AGTTCATCTG GTGGATGTTT 5400 TTGCAGGTTA CTCTGAGAAT TTTGCTTATG AAAAATCATT ATTTTTAGTG TAGTTCACAA 5460 TAATGTATTG AACATACTTC TAATCAAAGG TGCTATGTCC TTGTGTATGG TACTAAATGT 5520 GTCCTGTGTA CTTTTGCACA ACTGAGAATC CTGCGGCTTG GTTTAATGAG TGTGTTCATG 5580 AAATAAATAA TGGAGGAATT GTCAAAAAAA AAAAAAAAA AAAAAAAAA AAAAAAAAA 5640 AAAAAAA AAAAAAAA AAAAAAAA 5668 Title: COMPOSITE'S AND METHODS FOR THERAPY AND DIAGNOSIS CONTACT CANCER

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